



## Abstract

The Minnesota 4-H Science of Agriculture Challenge is a new youth development program that focuses on engaging youth in hands-on agriculture exploration while increasing agricultural literacy, enhancing STEM skills, and educating youth about career opportunities that exist within agricultural sciences. 4-H members identify an agricultural issue within their community and work with a business and industry mentor to apply STEM concepts to develop a potential solution. Teams share their research and results in their communities and at the state contest.



2015 Dakota County Science of Agriculture Team  
Topic: Farming for the Future

## Engaging Youth in Agriculture Career Exploration: 4-H Science of Agriculture Challenge

### 2015 Event Demographics



12 Teams  
Participated



44 Youth  
Participants



Average  
Participant Age



57%

43%

Youth participants were asked to complete a post event survey to determine the exposure to agriculture they experienced during the program and their interest in pursuing an agricultural career at the program's completion. The final survey response rate was 100% (N=44).



Forty youth (92%)  
indicated that they had  
met with an agriculture  
community leader.



Thirty nine youth (89%)  
plan to pursue a career in  
agricultural science.



Thirty five youth (79%)  
wanted to study agriculture  
in college.

### 2016 Expansion Plans

The Minnesota 4-H Science of Agriculture Challenge has the potential to fill the hole that currently exists in the agricultural career pipeline while teaching youth that their participation in 4-H can lead them to college and/or trade school and into a viable career in agricultural sciences. During 2016, Minnesota 4-H would like to increase the number of teams from 12 to 40. Youth will also participate in regional exhibitions prior to attending the state contest on the University of Minnesota St Paul Campus in June 2016.



Washington County Team  
Topic: Overwintering Bees in  
Minnesota



Crow Wing County Team  
Topic: Buffer Zones: Protecting our  
Waterways with Native Plants



Le Sueur County Team  
Topic: A comparison of efficiency  
and exhaust analysis of B10  
Diesel, B100 Homemade  
Biodiesel, Kerosene and Ethanol

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